

REMARKS:

In the Office Action dated March 5, 2009, claims 1, 3-9, 11-16, 20, 32-36 and 38-42, in the above-identified U.S. patent application were rejected. Reconsideration of the rejections is respectfully requested in view of the following remarks. Claims 1, 3-8, 11-16, 20, 32-36 and 38-42 remain in this application, claims 2, 9, 10, 17-19, 21 and 37 have been canceled, claims 22-31 have been withdrawn and new claims 43 and 44 have been added to the application. Support for the language “wherein at least the 14 5’ most nucleotides are completely complementary to said target transcript” can be found at page 11, lines 7-20 in the present application.

Claim 9 was objected to as being of improper dependent form. Claim 9 has been canceled rendering this objection moot.

Claims 1, 3-9, 11-16, 20, 32-36, and 38-42 were rejected under 35 USC §102(e) as anticipated by McSwiggen. The Office Action contends that the claims encompass a single stranded RNA that forms a self-complementary RNA duplex (i.e. a hairpin RNA structure). The claims have been amended to clarify that the RNA is completely single stranded. While the language “completely single stranded” is not specifically used in the present application, one skilled in the art would know that the RNA is completely single stranded in view of the disclosure. For example, page 4, lines 25-27, indicate that the molecule is 14-50 nt in length and that at least the 14-20 5’ most nucleotides are substantially complementary to the target RNA transcript. A 14 nt RNA molecule in which the 14 5’ most nucleotides are substantially complementary to a target RNA could not include a hairpin structure. In addition, page , 16, lines 21 to page 17, line 4 of the present application indicates that “[A]lternatively to the application of siRNAs as synthetic double-stranded or

single-stranded siRNAs, it is conceivable to also administer an antisense siRNA precursor molecule in the form of a hairpin stem-loop structure comprising 19 to 29 base pairs in the stem with or without 5' or 3' overhanging ends on one side of the duplex and a nucleotide or non-nucleotide loop on the other end". This disclosure clearly indicates that a molecule with a hairpin stem and loop structure is not considered to be the same as a double-stranded or single-stranded siRNA in the present invention. Thus, one skilled in the art would interpret the language "single stranded" as completely single stranded in the present application. Paragraph [0115] in McSwiggen indicates that the siNA can be a single stranded hairpin polynucleotide having self-complementary sense and antisense regions, where the antisense region is complementary to a target nucleic acid molecule.

McSwiggen does not disclose a completely single stranded molecule (i.e. without a hairpin). The present invention uses a completely single stranded antisense molecule. In other words, there are no double stranded regions or hairpins in the presently claimed molecule. Applicants respectfully point out that when a single stranded molecule is used in McSwiggen, the single stranded molecule must include both sense and antisense regions which form the hairpin structure. In contrast to McSwiggen, the presently claimed molecule does not include a hairpin structure. In addition, claims 3, 43 and 44 indicate that the RNA molecule has a length from 15-29 nucleotides. McSwiggen's molecule is at least 40 nucleotides in length. In view of the above amendments and arguments, applicants contend that the presently claimed invention is not anticipated by McSwiggen and request that this rejection be withdrawn.

Claims 1, 3-9, 11-12, 16, 20, 33-34 and 38-42 were rejected under 35 USC §102(e) as anticipated by Finney. Finney discloses an RNAi molecule that forms a hairpin loop

paragraph [0110]. Thus, Finney's molecule cannot be completely single-stranded. For the reasons discussed above regarding McSwiggen, applicants contend that the presently claimed invention is not anticipated by Finney and request that this rejection be withdrawn.

Applicants respectfully submit that all of claims 1, 3-8 11-16, 20, 32-36, and 38-44 are now in condition for allowance. If it is believed that the application is not in condition for allowance, it is respectfully requested that the undersigned attorney be contacted at the telephone number below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fee for such an extension together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account No. 02-2135.

Respectfully submitted,

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